

COMPUTER PRODUCTS ————— TEN FIFTY



CP 10/50

Offers precise analog computation at low voltage levels and high speed.

A fully transistorized system designed to meet the requirements of industry, government and education for a truly general purpose, fully expandable, accurate and user-oriented computer. Introduction of the solid state, electronic 3-mode control (EMC) gives the CP 10/50 computational capability far beyond that found in earlier 50 amplifier systems.

Designed for tomorrow, the CP 10/50 is ideally suited to the requirements for hybrid computation. It can be linked to any standard general purpose digital computer, providing the most efficient combination of analog computation with digital logic and memory systems.

REAL TIME — REPETITIVE OPERATION — HIGH SPEED

Real time and low speed problems are easily worked in the CP 10/50. Relays are used for low speed repetitive operation to assure minimum leakage and more accurate solutions.

Sophisticated problems requiring high speed repetitive and iterative operations are performed in the CP 10/50 by use of high speed Electronic Mode Control. The patented solid state EMC switch combines the advantages of low leakage and isolation characteristic of electromechanical relays with high speeds typical of transistorized electronic switching.

The hold mode as provided in the CP 10/50 requires no additional amplifiers, thus permits 3-mode operation in a small computer without reduction of its computational capability.



PROBLEM PATCH PANEL

The CP 10/50 offers a unique patching system almost completely free from cross-talk and leakage, the disadvantage of previous plastic patch panels. The patch panel has 1600 holes. It provides a shielded system when used with standard CP shielded patch cords. The panel may be engaged simply and quickly with manual locking handles.

Layout of the patch panel provides important advantages to the computer operator . . . combination of equi-distant holes, thoughtful layout and highly efficient shielding reflects the operator's point of view in analog computation. Panel layout is such that most problems can be patched using more bottle plugs than cords . . . resulting in a neater panel, less cross-talk, greater reliability and greater convenience in storing patched panels.

The CP 10/50 shielded panel system is of major importance when the computer is used for high speed repetitive or iterative operations, contributing to stability of operation and generation of useful and accurate solutions.

SOLID STATE SWITCHING

Repetitive networks are equipped with high quality transistorized switches contained within the feedback loop. They are controlled through the EMC panel by the logic level outputs of timers, comparators or external logic elements.

HYBRID COMPUTATION

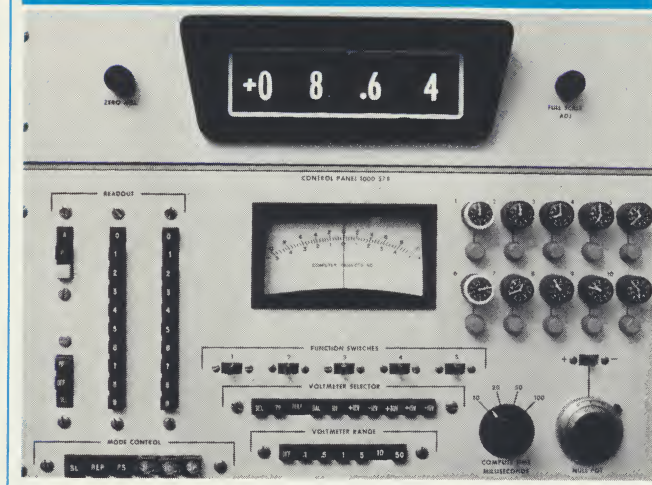
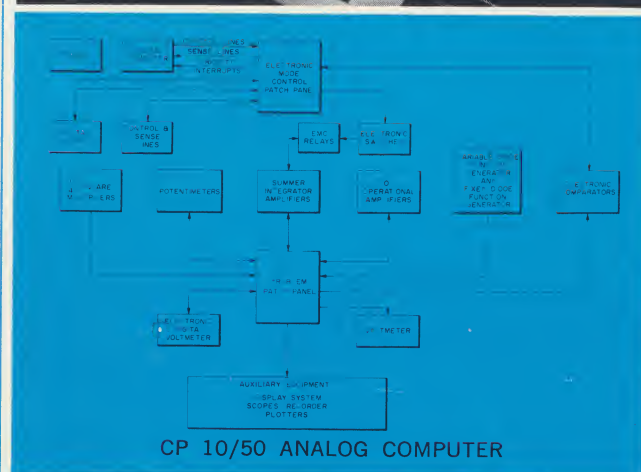
Addition of logic control extends the role of the CP 10/50 in small hybrid installations. A removable 440-hole auxiliary patching and control system can be furnished with the CP 10/50 to provide logical control of the electronically-switched integrators. Sense, interrupt and control lines from the digital computer; signal and EMC trunk lines from the problem patch panel; control and operate lines from electronic timers and comparators all terminate at this panel which provides the means for most conveniently interconnecting the two computers. Thus, the memory and logic capability of a digital system can be combined with the high speed parallel computational capability of an analog system so as to afford the most effective and economical overall system.

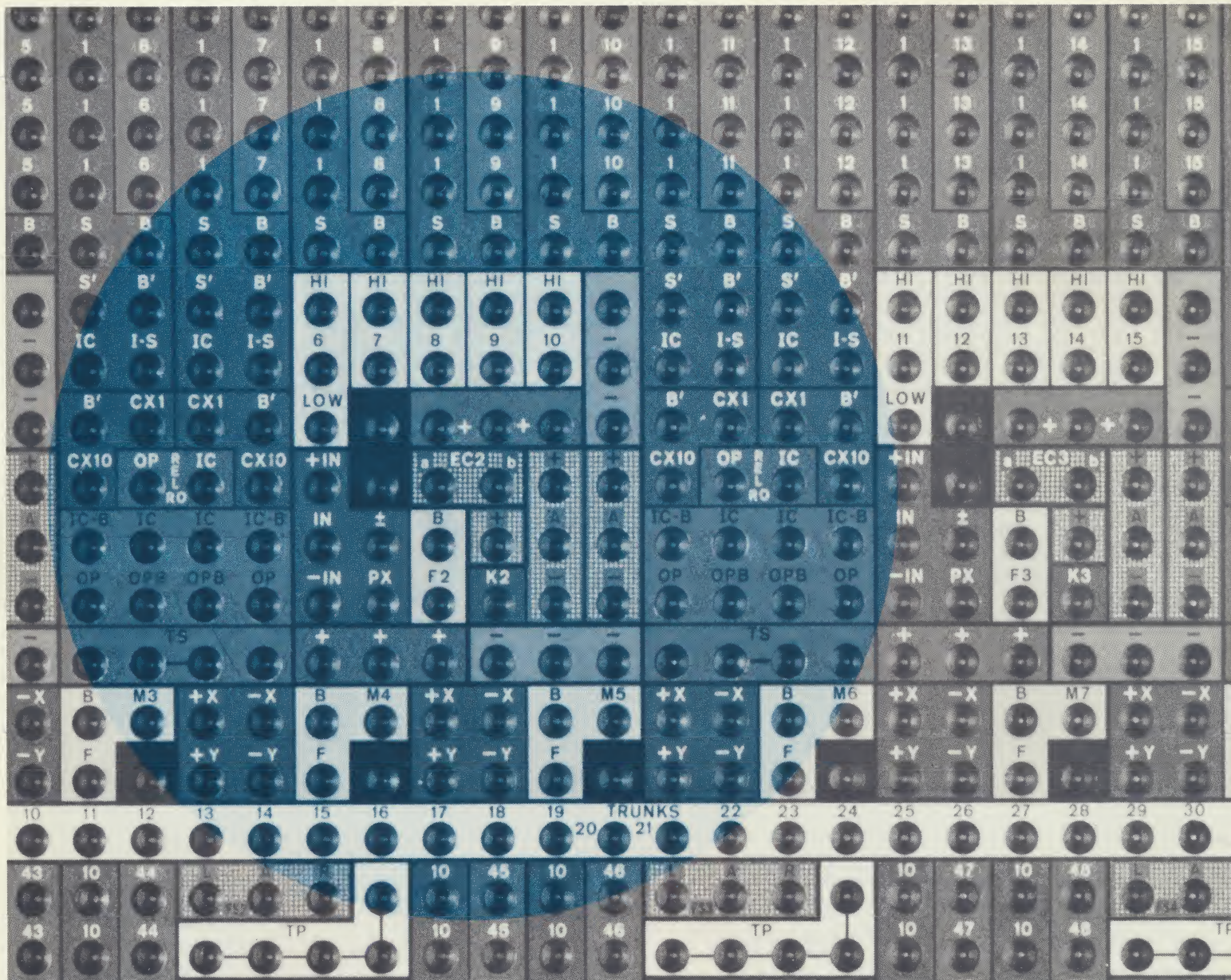
SYSTEM EXPANSION

The basic CP 10/50 computer is pre-wired to satisfy two principal objectives. Expandability of the system has been planned so that the user may add components at will without changing or modifying the basic computer chassis, and internal wiring provides many of the connections which are made by patching in less thoughtfully designed systems . . . compare the patch panel of a CP 10/50 programmed for a complex problem with that of a comparable computer and see the difference. The main advantage of this basic design is reduction of cross-talk, minimum leakage and much greater reliability.

OPERATING CONTROL CONSOLE

Typical of the human engineering found in the CP 10/50 is the layout of the operating console. All essential functions have been brought to the front of the panel. Logical grouping of switches, potentiometers, timers, indicators and annunciators assures the operator of fewer errors through mismanipulation. The CP 10/50 is truly the operator's computer.





CP 10/50

Section of pre-patch panel, shown here full size, illustrates superiority of the layout. Experienced analog computer operators will quickly recognize the many points of careful planning whereby related functions are grouped so as to simplify patching of the problem.



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